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ABSTRACT

A study of 522 university students was undertaken to determine how often they used their library and why, as well as to develop a general profile of college student library users. Descriptive statistics revealed that the majority of students used the library at least once a week. Obtaining a book or an article for a course paper was the most common reason cited for library use, followed by studying for a test, and then using the computerized indexes and online facilities. A setwise multiple regression analysis revealed that students who used the libraries most tended to be older, male, those who did not speak English as their native language, who lived the nearest to the academic library, who preferred to study alone, and who had the lowest levels of library anxiety. In addition, these students tended to visit the library either to study for a test, to read current newspapers, to read their own textbook, to use computerized indexes and online facilities, or to meet friends. The implications of these findings are discussed, as are recommendations for future research. (Contains 15 references.) (Author)

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Prevalence and Reasons for University Library Usage

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Abstract

A study of 522 university students was undertaken to determine how often they used their library and why, as well as to develop a general profile of college student library users. Descriptive statistics revealed that the majority of students used the library at least once a week. Obtaining a book or an article for a course paper was the most common reason cited for library use, followed by studying for a test, and then using the computerized indexes and online facilities. A setwise multiple regression analysis revealed that students who used the libraries most tended to be older, male, those who did not speak English as their native language, who lived the nearest to the academic library, who preferred to study alone, and who had the lowest levels of library anxiety. In addition, these students tended to visit the library either to study for a test, to read current newspapers, to read their own textbook, to use computerized indexes and online facilities, or to meet friends. The implications of these findings are discussed, as are recommendations for future research.

Prevalence and Reasons for University Library Usage

In 1963, Maurice Line concluded that "there is a general impression that students use libraries far less than they ought to" and that, before effective interventions can be implemented, reasons for library use and nonuse need to be determined. Three decades later, after tremendous technological changes, there is still a need for formal library studies which attempt to determine the prevalence of college library use, characteristics of library users, and which services and materials are most used by patrons. Data from such studies will help to facilitate planning and decision-making in each library.

Since Line's (1963) study, several studies have been undertaken in the area of library use. Burns (1977), based on a self-report survey completed by 140 students at San Diego State University, found few differences in personal characteristics between users and non-users of the library. However, Burns found a positive relationship between year of study and library use. Fielder (1978) conducted a large study in which 3,802 students, staff, and faculty were interviewed upon leaving the Washington University library. The majority of respondents reported using the library at least once a week. The main reasons cited for using the library, in order of importance, were: (1) to do class-related reading (58%), (2) to do class-related research (22%), to study for a test (5%), and to do non class-related research (1%).

Gratch (1980) found that (1) 83% of the students used the library at least once a week, (2) seniors utilized the library to a greater extent than did freshmen, and (3) 82% of the respondents used the library to study their class textbooks or notes. In a study conducted in the same year, Kodras and Prather (1978) reported that 82% of the Georgia State University students sampled used the library at least once a week, 38% indicated that they used the library more than once a week, and 33% reported daily use. The typical user was found to be a male upperclassman majoring in liberal arts or business administration.

In contrast, however, Linton (1980) found that the majority of the student population at the College of Charleston did not use the library. Furthermore,

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Pieschl (1979), conducting a study at the University of Northern Colorado, found no significant relationship between library use and the following variables: sex, college/major, class, and GPA. Nevertheless, upperclassmen reported using the library more frequently than did underclassmen who primarily utilized the library in order to read their own materials.

More recently, a study conducted at the South Seattle Community College revealed the following: (1) 52% of students used the library at least once a week; (2) 13% of students never used the library; (3) 10% of students almost never used the library; (4) 46% of vocational students were frequent users, compared to 64% of liberal studies students; and (5) 63% of non-native English speakers were frequent users of the library, compared to 45% of native speakers.

Unfortunately, much of the research conducted in the areas of library use and library users is more than a decade old. That is, these studies were undertaken before the use of microcomputers became an integral part of the library search process. In addition, most of the studies in this area used descriptive statistics, and as such, attempts were not made to draw inferences. Even more importantly, in the vast majority of these studies, the data were collected by administering surveys to students as they entered or exited the library, or while they were in the library. As such, it is likely that the samples used in these studies were biased, since they may not have included a representative proportion of non-users and infrequent users of libraries.

As academic libraries are compelled more than before to compete with other university departments and services for available funds, there is a need for current empirical studies which determine who uses these libraries and which services and equipment are most needed by these patrons. Such information will facilitate planning and decision-making. Thus, the purpose of this study was to ascertain how often students use the library and why they use it. In addition, the authors sought to determine the most popular reasons cited by students for visiting the library and to develop a general profile of college student library users. The following independent variables were considered in this study:

gender, age, native language, year of study, academic achievement, semester course load, number of earned credit hours, number of library instruction courses undertaken, computer usage experience, study habits, employment status, distance between home and the nearest academic library, level of library anxiety, and reasons for visiting the library.

Method

Instruments

Two instruments were used in this study: the Demographic Information Form (DIF) and the Library Anxiety Scale (LAS). The Demographic Information Form (DIF), which was developed specifically for this study, recorded relevant demographic information. The LAS, developed by Bostick (1992), is a 43-item, 5-point Likert-format instrument which assesses levels of library anxiety. Scores for the total scale, which range from 43 to 215, were used as an overall measure of library anxiety, with high scores on the scale representing high levels of library anxiety. A Cronbach's alpha reliability of .80 and a three-week test-retest reliability of .74 were reported by the author (Bostick, 1992). For the present study, the reliability of the LAS, as measured by coefficient alpha, was .92.

Subjects and Procedure

Subjects comprised 522 students from a mid-southern (61.7%) and a northeastern (38.3%) university. Both universities were public with enrollments of 10,000 and 16,000, respectively. Participants were students taking in undergraduate and graduate courses across different disciplinary areas, such as psychology, education, marketing, management, and biology. Subjects comprised 150 freshmen (28.7 percent), 160 sophomores (30.6 percent), 82 juniors (15.7 percent), 60 seniors (11.5 percent), and 70 graduates (13.4 percent). These students were administered the LAS and the DIF during class sessions. Since no difference in mean frequency of library visits was found between students from the two universities ($t = 0.44$, $p > .05$), responses were combined. The ages of the respondents ranged from 18 to 60 years (mean = 22.5, $SD = 6.9$). Slightly

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less than two-thirds of the sample (62.9%) was female, while 75.5% spoke English as their native language. The number of computer courses taken by the participants ranged from 0 to 9 (mean = 1.0, *SD* = 1.3), and the number of library instructional courses taken also ranged from 0 to 9 (mean = 0.6, *SD* = 0.8). Subjects took an average of 30.4 minutes to travel to their nearest academic library from their home (*SD* = 29.1).

Results

Table 1 presents the distribution of the number of library visits. Nearly one-fifth of the sample used the library less than once a week, on average. Another one-fifth of the sample frequented the library four or more times per week. The remaining three-fifths visited the library at a mean rate of between one and four times per week. Overall, students visited the library at a mean rate of 2.6 times per week (*SD* = 2.2).

Insert Table 1 about here

Table 2 presents the 13 reasons for using the library, together with the percentage of students who cited them as among their top three reasons. It can be seen that the most popular reason for visiting the library was "to obtain a book or article for a course paper." Nearly three-quarters of the sample reported using the library for this purpose. This was followed by "to study for a test," "to use computerized indexes and online facilities," and "to read own textbook," respectively--all of which were cited by more than half the subjects. Interestingly, although the three nonacademic activities (i.e., "to read current newspapers," "to meet friends," and "to find out information about potential employers") were each cited as a main reason for library usage by more than one-fourth of the sample.

Insert Table 2 about here

Multiple regression analysis was performed in order to determine the relationship between the frequency of library visits and the selected variables. The technique of least squares was used to estimate the regression coefficients in all the models which were fitted. Specifically, a setwise regression was utilized in order to select an optimal set of variables for each antecedent in terms of maximum proportion of variance explained (Tabachnick & Fidell, 1989). All possible models involving some or all of the selected variables were examined. All variables were entered into the multiple regression model except for year of study (i.e., freshman, sophomore, junior, senior, and graduate), which was neither a dichotomous nor an interval-level variable. The Shapiro-Wilk test (Shapiro & Wilk, 1965; Shapiro, Wilk, & Chen, 1968) revealed no evidence ($p > .05$) that the distribution of the subscale scores was non-normal, justifying the use of multiple regression. In addition, evaluation of assumptions of linearity and homogeneity revealed no threat to the multiple regression analyses. The setwise multiple regression analysis revealed the following variables which contributed significantly (F [12, 509] = 7.41, $p < .0001$) to the prediction of frequency of library usage: age (F [1, 509] = 25.57, $p < .0001$), sex (F [1, 509] = 2.66, $p < .10$), native language (F [1, 509] = 4.17, $p < .05$), number of library instruction courses undertaken (F [1, 509] = 6.73, $p < .01$), distance lived from nearest academic library (F [1, 509] = 10.34, $p < .01$), study habits (F [1, 509] = 7.51, $p < .01$), and library anxiety level (F [1, 509] = 5.71, $p < .05$). In addition, five of reasons for using the library were significant predictors of frequency of library visit, namely: "to study for a test" (F [1, 509] = 4.77, $p < .05$), "to read current newspapers" (F [1, 509] = 8.30, $p < .01$), "to read own textbook" (F [12, 509] = 4.82, $p < .0001$), "to use computerized indexes and online facilities" (F [1, 509] = 3.72, $p < .10$), and "to meet friends" (F [1, 509] = 2.19, $p < .15$). These 12 variables combined to explain 27.7% of the variation in frequency of library visits. Using Cohen's (1988) criteria for assessing the predictive power of a set of independent variables in a multiple regression model, the proportion of variance explained indicated a medium effect

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size. Examination of the standardized residuals generated from the model suggested that the assumptions of normality, linearity, and homoscedasticity were met. The model implied that students who used the libraries the most tended to be older, male, those who did not speak English as their native language, who lived the nearest to the academic library, who preferred to study alone, and who had the lowest levels of library anxiety. In addition, these students tended to visit the library either to study for a test, to read current newspapers, to read their own textbook, to use computerized indexes and online facilities, or to meet friends.

Five variables (academic achievement, semester course load, number of earned credit hours, computer usage experience, and employment status) did not make a significant contribution to the explanation of frequency of library usage. In addition, a univariate analysis of variance (ANOVA) revealed no difference in the frequency of library visits between students from different years of study (F [4, 509] = 0.33, p > .05).

A series of follow-up t tests and Fisher's exact test analyses were conducted in order to compare subgroups identified by the regression model with respect to reasons for using the library. Findings revealed that, compared to younger students, older students tended to use the library less to study for a test (t = 2.93, p < .05), and to use the library more to obtain a book or article for a course paper (t = 2.36, p < .05), to read current newspapers (t = 2.42, p < .05), to check out books (t = 3.52, p < .05), and to search and obtain information for a thesis (t = 2.10, p < .05). With regard to gender, males tended to use the library more than did females to study for a test (76.0% vs. 62.9%), to study for a class project (55.6% vs. 44.7%), and to meet their friends (36.3% vs. 26.9%). On the other hand, males tended to use the library less than did females to obtain a book or article for a paper (67.8% vs. 77.8%).

Non-native speakers tended to use the library more than did native speakers in order to study for a test (76.6% vs. 66.1%), to study for a class project (60.5% vs. 45.4%), to obtain a book or article for a paper (82.3% vs. 70.9%), to

find information about potential employers (36.3% vs. 25.2%), to read books on reserve (46.0% vs. 35.9%), to read current newspapers (38.7% vs. 28.3%), to read their own textbook and study (58.9% vs. 48.5%), to return books (37.9% vs. 29.1%), and to check out books (48.4% vs. 39.5%).

Students who lived the furthest from an academic library tended to use the library more than did their counterparts in order obtain a book or article for a paper ($t = 2.83$, $p < .05$) or to use computerized indexes and online facilities ($t = 2.61$, $p < .05$), and tended to utilize the library less to use the photocopy machine ($t = 2.86$, $p < .05$).

Compared to students who preferred to study alone, students who preferred to study cooperatively tended to use the library more to study for a test (78.6% vs. 66.0%), to study for a class project (58.7% vs. 45.6%), to read books on reserve (46.8% vs. 36.0%), to read current newspapers (38.1% vs. 28.6%), and to meet their friends (39.7% vs. 29.2%). Finally, students with the highest levels of library anxiety tended to use the library in order to use computerized indexes and online facilities moreso than did their low-anxious counterparts ($t = 2.43$, $p < .05$).

Discussion

The purpose of this study was to develop a demographic profile of the typical student user of academic libraries. Specifically, an attempt was made to determine the prevalence and reasons for students' library usage. The finding that 81.3% reported using the library at least once a week is congruent with Gratch's (1980) finding of 83%, and suggests that academic libraries are being used by a diverse population of students.

With regard to how the library is utilized, each of the 13 reasons for using the library was cited by at least 25% of the students. This suggests that the library is being used for a wide variety of purposes. Obtaining a book or article for a course paper appears to be the most important reason for visiting the library. This suggests that course assignments play a major role in determining how often students visit libraries. Students also appear to use the

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library frequently to study for a test. This may reflect the fact that the library is perceived by many students as being the quietest place in which to study, or maybe the most convenient place for a group of students to meet in order to study cooperatively. In addition, use of computerized indexes and online facilities appears to be the third most cited reason for visiting the library. This finding is indicative of the technological change which have occurred in libraries over the last decade.

With respect to predictors of frequency of library use, the positive relationship found between age and frequency of library visits, which supports the finding of Gorman (1984), may be explained by Jiao, Onwuegbuzie, and Lichtenstein (1996), who noted that younger college students typically have higher levels of anxiety than do their older counterparts. This finding also might reflect library experience, since a positive relationship exists between age and the number of library courses taken (Jiao et a., 1996). Specifically, older students who are likely to have taken more library courses may be more confident about using the library, culminating in their utilizing the library to a greater extent. It should be noted that, whereas older students appear to undertake to a greater extent than do young students most of the library activities which tend to be associated with course assignments (i.e., obtaining a book or article for a course paper, checking out books, and searching and obtaining information for a thesis), they use the library less than do their younger counterparts in order to study for tests. These findings suggest that older students utilize the library resources more extensively. In addition, the fact that older students tend to use the library more than do younger students in order to read current newspapers suggests that older students are more interested in keeping abreast with global issues.

A somewhat surprising finding was that frequency of library use did not vary with respect to year of study. This finding, which is in contrast to Gratch (1980), Kodras and Prather (1978), and Linton (1980), may be indicative of the comprehensiveness of projects assigned by instructors at all levels. That is,

it is likely that, regardless of year of study, assignments often require at least limited use of the library.

The result that males frequent the library more than do females in order to study for a test, to study for a class project, and to meet their friends, whereas females tend to use the library more to obtain a book or article for a paper, indicates that males tend to utilize the library more for cooperative/social activities than do females.

The finding that students whose native language is not English visit the library more frequently than do native English-speaking students might be explained by the fact that the former experience significantly greater problems adapting to and using the library than do their counterparts as a result of cultural differences, communication difficulties, and the inability to conceptualize and to apply the English language system (Goudy & Moushey, 1984). It is likely that these students take longer to accomplish tasks at the library and thus have to make more trips. Indeed, this might explain why non-native speakers more often tend to use the library in order to conduct course-related library searches than do native speakers. Furthermore, the finding that they utilize the library extensively to study material may reflect the fact that many of these students come from countries whose libraries have closed stacks (Liu, 1993). As such, these students may have come to view libraries more as study halls than as places to conduct research Liu (1993). The finding that a relatively high proportion of non-native speakers tend to use the library for job-related library searches may reflect the fact that these students, who typically are subjected to strict immigration requirements, have limited career options, at least initially. Also, the use of the library by many non-native speakers to read current newspapers indicates an attempt to keep up-to-date with issues relating to their own country, since libraries tend to subscribe to newspapers from a wide variety of countries.

Not surprisingly, students who live furthest from their academic library tend to use the library photocopy equipment less than their counterparts.

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Indeed, it is clear that these students are utilizing one or more of the many more convenient options for photocopying available to them. On the other hand, the finding that these students utilize the library more than their counterparts in order to obtain a book or article for a paper and to use computerized indexes and online facilities may reflect the fact that the time it takes them to travel to the library culminates in them having less time in which to utilize the library. This, in turn, may render it difficult to complete a library task in one session.

The fact that students who prefer to study alone tend to utilize the library more than do students who prefer to learn in cooperative groups perhaps could be explained by the fact that many library activities are acted upon individually by students. Indeed, this explanation is supported by the finding that students who prefer to study cooperatively tend to utilize the library more for activities which can be undertaken collaboratively, namely, to study for a test, to study for a class project, to read books on reserve, to read current newspapers, and to meet their friends.

Finally, the finding that students with the highest levels of library anxiety tend to use the library in order to use computerized indexes and online facilities moreso than do their low-anxious counterparts is consistent with the finding of Bostick (1992) that *mechanical barriers* is one of the major components of library anxiety. According to Bostick (1992), *mechanical barriers* refers to the increase in anxiety levels when students are using, attempting to use, or contemplating using mechanical library equipment, including CD-ROMS, computers, and microfiche.

Although this study has identified some characteristics of students who use the library frequently, as well as their reasons for using the library, much more research is needed in this area. In particular, it is important to find out how long students typically stay in the library, as well as the library activities in which students spend the most time engaged. In addition, it is necessary to determine which areas, equipment, and services are used most frequently by

students. Such information would help in the development and implementation of services appropriate to college students' needs.

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Table 1

Mean Number of Library Visits per week

Mean number of visits per week	Percentage
< 1	19.7
1 - < 2	15.6
2 - < 3	21.9
3 - < 4	21.7
4 - < 5	9.9
5 or more	11.2

Table 2

Reasons for Library Usage

Reason	Percentage
To obtain a book or article for a course paper	74.3
To study for tes:	67.1
To use the computerized indexes and online facilities	53.2
To read own textbook	50.0
To study for a class project	49.0
To check out books	43.3
To use the photocopy machine	42.1
To read books on reserve	38.9
To search and obtain information for a thesis/dissertation	36.4
To return books	32.0
To read current newspapers	31.8
To meet friends	31.4
To find out information about potential employer	28.4

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